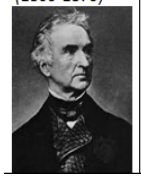
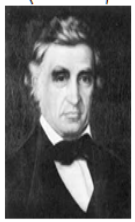
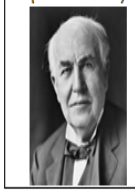
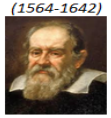
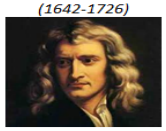
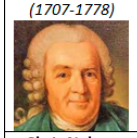
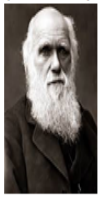
Somerville Scientists Coverage

Year group					
1			Materials **Charles Macintosh** *(1766-1843)*  Scottish chemist and Inventor of waterproof fabric. The mackintosh raincoat is named after him.	Plants **Wangari Maathai** (1940-2011)  Wangari Maathai was a Kenyan environmentalist who began a movement to plant trees and re-forest her country. She was the first African woman to win a Nobel Peace Prize.	
2		Humans **Dr Ernest Madu** *(born 1960)*  Dr Ernest Madu is a cardiologist. His work focuses on providing affordable healthcare in low-resource nations.	Materials **John Loudon McAdam** *(1756-1836)*  John Loudon McAdam was a Scottish engineer who modernised the way we build roads. He was the inventor of tarmacadam road surfacing – commonly called tarmac.	Plants **David Douglas** (1799-1834)  David Douglas was a Scottish botanist, best known as the namesake of the Douglas-fir. He worked as a gardener, and explored the Scottish Highlands, North America, and Hawaii.	
3	Rocks **Mary Anning** *(1799-1847)*  Mary Anning was an English palaeontlogist and fossil collecter. She became known around the world for important finds she made in Jurassic fossil beds in Dorset.	Forces and magnets **Michael Faraday** *(1791-1867)*  Michael Faraday was an English scientist. In 1831, he discovered electromagnetic induction. This was a very important discovery for the future of science and technology.	Animals including humans **Wilhelm Conrad Rontgen** *(1845-1923)*  Wilhelm Rontgen was a German physicist who discovered X-rays in 1895. He was awarded many honours and won the Nobel Prize for physics in 1901.	Plants **Professor Monique Simmonds**  Monique Simmonds is the deputy director of science at the Royal Botanic Gardens, Kew. She researches traditional and commercial uses of plants and fungi. Her work involves her promoting plant and fungal-based solutions to global challenges.	Light **Justus von Liebig** *(1803-1873)*  Justus von Liebig was a German chemist. In 1835 he developed a process for applying a thin layer of metallic silver to one side of a pane of clear glass. This technique was soon adapted and improved, allowing for the mass production of mirrors.

4	**Animals Including Humans** **William Beaumont** (1785-1853)  William Beaumont was a surgeon in the U.S. Army. He carried out lots of experiments and research on human digestion. As a result, he provided the world with new information about the digestive process in living human beings.	**All Living Things and Habitats** **Jane Goodall** *(Born 1934)*  Jane Goodall is an expert on wild chimpanzees. She is known for her ground breaking discoveries about their behaviour. She has shown us the urgent need to protect chimpanzees from extiction.	**Materials** **Bernard Palissy** *(1510-1590)*  Bernard Palissy was a French potter and scientist. He is often credited as the man who 'discovered' the modern theory of the water cycle. He asserted that rainfall alone was sufficient for the maintenance of rivers.	**Sound** **Christian Doppler** *(1803-1853)*  Christian Doppler was an Austrian mathematician and physicist. He is celebrated for his principle known as the Doppler effect. This describes how noises sound different as you move toward or away from a noisy object.	**Electricity** **Thomas Edison** *(1847-1931)*  Thomas Edison was an American inventor. He is sometimes described as America's greatest inventor. He invented the first practical incandescent light bulb.
5	**Earth and space** **Maggie Aderin-Pocock** *(born 1968)*  Maggie is a British space scientist and science educator. She is working on the observation instruments for the Aeolus satellite, which will measure wind speeds to help the investigation of climate change.	**Forces** **Galileo Galilei** *(1564-1642)*  He was an Italian scientist. He discovered that if two objects of similar shape and size are dropped, they will fall at the same rate. **Sir Isaac Newton** *(1642-1726)*  He was an English scientist and mathematician. He 'discovered' the concept of gravity when sitting under a tree and an apple fell to the ground near him.	**Materials** **Spencer Silver** *(born 1941)*  Spencer Silver is an American scientist who together with Arthur Fry was the inventor of Post-it notes in 1974. At the time, he was working to develop new classes of adhesives.	**Animals including humans** **Sarah Fowler**  Sarah Fowler (OBE) is a marine biologist. She is the principal scientist of the Save Our Seas Foundation. Her research has identified the global threat to sharks and she shares strategies of how we can protect them.	**Habitats** **David Attenborough** *(born 1926)*  Sir David is an English broadcaster and naturalist. He has made many famous wildlife programmes. He was knighted in 1985.
6	**Electricity** **Peter Rawlinson**  Peter Rawlinson is a British engineer based in California. He is working on the development of electric vehicles, providing clear vision for a next-generation product.	**All living things and habitats** **Carl Linnaeus** *(1707-1778)*  Carl Linnaeus was a Swedish scientist who developed the modern system of classifying and naming organisms. Before this the names of living things were often very long. He gave them a two-part name. **Chris Nelson**  Chris Nelson is a horticulturist and a director of Growing Underground which uses hydroponic techniques to grow pesticide-free crops in a former London underground air-raid shelter.	**Humans** **William Harvey** *(1578-1657)*  William Harvey was an English physician and the first person to correctly describe blood's circulation in the body. He showed that arteries and veins form a complete circuit.	**Evolution and inheritance** **Charles Darwin** *(1809-1882)*  Charles Robert Darwin was born in Shrewsbury and was an English naturalist and biologist. His scientific theory of evolution by natural selection became the foundation of modern evolutionary studies.	**Light** **Abu Ali al-Hasan (Alhazen)** *(965-1040)*  Alhazan was an Iranian mathematician, astronomer and physicist. He was the pioneer of modern optics. He carried out experiments with pinhole cameras and candles and explained how the image is formed by rays of light travelling in straight lines.